

EXECUTIVE SUMMARY

INTRODUCTION

Power is one of the key infrastructures for growth of Industry and economy. We have seen very rapid progress in this critical sector in recent past. Thus we will soon be touching 300 GW installed capacity. Renewable energy is becoming increasingly cost competitive as compared to fossil fuel-based generation. Renewable energy equipment prices have fallen dramatically due to technological innovation and increased manufacturing scale. Accordingly, the installed capacity from Renewable Sources has also reached about 43 GW; thus accounting for about 14.4% of total installed capacity in the country. But the challenge before us in this sector is also huge.

As part of our Intended Nationally Determined Contributions (INDCs) before United Nations Framework Convention on Climate Change (UNFCCC), we have to achieve 40% installed capacity from non-fossil sources of energy by the year 2030. Our plan to achieve 100 GW of solar power, including 40 GW of Rooftop-solar power plants, is part of this green commitment. Rooftop solar (RTS) projects have clear advantages of lower technical losses, easy integration with grid as also of minimal need of land pooling and dedicated transmission corridor. Estimates show that nearly 70% of the building stock in India is yet to be constructed. This will further widen the avenues for continued solar PV rooftop installation. Ministry of New & Renewable Energy proactively supports development of RTS projects through skill development programmes, financial assistance and incentives, concessional finance for developers and focused awareness programmes. But apart from the Ministry, there are several partners who play key role in creating positive framework for RTS projects.

INSTITUTIONAL FRAMEWORK

Role of MNRE

India is the only country which has an exclusive Ministry (MNRE) dealing with New and Renewable Energy Sources. MNRE aims to develop and deploy new and renewable energy for supplementing the energy requirements of the country. MNRE has been implementing comprehensive programmes for the development of Roof top solar power in the country.

Role of Indian Renewable Energy Development Agency (IREDA)

IREDA is a public limited company established in 1987 under the administrative control of MNRE. The key objectives of IREDA are to operate a revolving fund for the promotion, development and extending financial assistance to renewable energy sectors including roof top solar power. IREDA provides concessional loan financing to project developers, equipment manufacturers, financial intermediaries and end-users.

Role of State Nodal Agencies

Almost all the states have formed Renewable Energy Development Agency (IREDA) in their respective states to promote and facilitate the development of renewable energy projects / programmes. They act as a vital link between MNRE and those (in the various states) for whom the programmes of the Ministry are intended. These Nodal agencies function under the direct control of their respective state governments, but receive financial support from MNRE for state-wide programme implementation. The main activities of the Renewable Energy Development Agencies are to formulate the state renewable energy policies as per MNRE guidelines and State Government Policies, to facilitate the development and harnessing of environment friendly RE sources, to meet and supplement minimum rural energy needs through sustainable RE projects, to enhance the use of energy sources that assist in mitigating environment pollution and to disseminate information regarding RE sources through newsletters, brochures and websites etc.

Forum of Regulators

The forum of regulators was constituted in 2005 with Chairperson of CERC as its Chairperson and comprising Chairpersons of various SERCs with Secretary CERC as its members to consider the relevant provisions of Nation Electricity Policy, Tariff Policy in the power system in the country and to evaluate and address issues including on Renewable Energy Sector

Role of Solar Energy Corporation of India

Solar Energy Corporation of India Ltd. (SECI) is a CPSU under the administrative control of MNRE, set up on 20th September 2011 to facilitate the implementation of JNNSM and achievement of targets set therein. It is the only CPSU dedicated to the solar energy sector. However, through a Government of India decision, the mandate of the company has also been broadened to cover the entire renewable energy domain.

Role of National Institute of Solar Energy

National institute of Solar Energy is an autonomous institute under Ministry of New and Renewable Energy, Government of India established to facilitate the Research and Development, Testing, Certification, Skill development, Training, Consultancy and other related activities in the field of Solar Energy technologies. National Institute of Solar Energy also supports the Ministry in the implementation of prestigious National Solar Mission. The Government of India has converted Solar Energy Centre to an autonomous institution in September 2013 to assist the Ministry.

Role of RBI & Financial Institutions

Recently, Reserve Bank of India has included renewable energy projects under priority sector lending for which bank loans up to a limit of Rs. 15 crore to borrowers will be available for renewable energy projects including grid connected solar rooftop and ground mounted systems. For individual households, the loan limit is Rs. 10.00 lakh per borrower.

Ministry of Finance has advised all Public Sector Banks to provide loans for grid connected rooftop solar systems as home loan/ home improvement loan. So far, nine PSBs namely Bank of India, Syndicate Bank, State Bank of India, Dena Bank, Central Bank of India, Punjab National Bank, Allahabad Bank, Indian Bank and Indian Overseas Bank have given instructions to their branches in this regard.

COMPENDIUM ON POLICY, REGULATIONS AND TECHNICAL STANDARDS & FINANCING NORMS

To achieve the mammoth target for solar PV rooftop installation of 40 GW, the Central/State/UT Governments and Central/State Electricity Regulatory Commissions have undertaken several initiatives. The key initiatives/ promotional measures which have been initiated are :

- (a) Financial subsidy of 30% of project/bench mark cost for RTS projects in Residential/Institutional/Social sectors;
- (b) Financial incentive upto 25% of project/bench mark cost for RTS projects in Government/PSU sector;
- (c) Notification of Gross/Net metering policies by various States/UT Regulatory Commissions;
- (d) Financial support to RTS projects by various State/UT Governments;
- (e) Development of easy to access Online Portals by Distribution Companies (DISCOMS) for installation of RTS plants by individual consumers;
- (f) Empanelment of agencies with proven capacity and expertise for installation of solar panels, inverters, meters, etc. by various State/UT Governments;
- (g) Empanelment of Channel Partners/Aggregators by Central/State Governments;

- (h) Assessment of RTS potential and undertaking bidding process for cost efficient solar installations in various sectors;
- (i) Training of additional 10,000 Surya Mitra and staffs of DISCOMs/SNAs;
- (j) Provision of concessional credit to project Developers/Aggregators.

We must acknowledge that RTS projects need substantial coordination from several actors and heavily depend on local capacities and appropriate tools to design and implement effective programs. To ensure a consistent and robust eco-system across the country, we need to understand various initiatives taken by Central/ State Governments and Central/State Electricity Regulatory Commissions as also Financial Institutions. Accordingly, Ministry of New & Renewable Energy has developed this Compendium of Policies, Regulations, Technical Standards & Financing Norms for Solar Power Projects with assistance of IREDA and CBIP. It aims to provide all such policies, regulations and measures in collated fashion. Thus it covers all the policies for promotion of Solar Energy, Regulations on Net/ Gross – Metering, promotional policies of Ministry of New and Renewable Energy and Financial Institutions, orders/ policies of Central Electricity Authority. To increase the reach and the usefulness of the document, we have prepared a summary of each of the Policy/Regulation/Standards order issued by State Governments/ Regulatory Commissions/Central Electricity Authority as well as the Financing Norms issued by IREDA. We have also brought out a combined summary separately of the Policies, Regulations and Tariff orders for Solar power projects as well as Net-Metering Regulations. These summaries have been prepared in a simple way, to be easily understood. This compendium shall enable all stake holders to get such varied information about the Policies, Regulations and Tariff orders, Standards, Financing Norms, RBI Guidelines etc. along with their summary and comparative summary at one place instead of searching website of each organization.